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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,345	05/25/2000	Terry L. Gilton	6047-55230	7950

7590 10/20/2004

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EXAMINER
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FOURSON III, GEORGE R

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/579,345

Applicant(s)

GILTON ET AL.

Examiner

George Fourson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-9, 11-16, 18, 19, 26-29 and 32-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-9, 11-16, 18, 19, 26-29 and 32-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Applicant's arguments, see the Appeal Brief, filed 7/16/04, with respect to the rejection(s) of claim(s) 26,27,32,34 and 37 under 35 USC 102 have been fully considered and are persuasive. Specifically, that the reference relies on modification of the teachings of the reference through routine optimization. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6-9,11-16,18,19,26-29 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergman et al<sup>125</sup> in view of Hu et al and Nelson et al.  
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The reference is applied as stated in the paper mailed 12/16/03 in the rejections under 35 USC 102 and 35 USC 103 and as follows.

Bergman discloses that at temperatures near ambient ozone saturation occurs at about 20 ppm and decreases to almost zero at 60°C (col.2, lines 19-26).

Nelson et al discloses that ozone concentration is affected by processing parameters such as temperature (col.2, line 3). The reference further discloses temperature as a result effective variable useful to optimize to achieve a desired effectiveness (col.2, lines 5-27). The reference further discloses that an ozone concentration of >5 ppm is desirable with 20 ppm being more preferable (col.7, lines 1-5).

Hu et al discloses room temperature stripping of photoresist using water containing ozone (col.1, lines 35-62).

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In view of the teachings of Nelson et al and Hu et al related to the effect of temperature on photoresist stripping using ozone/water and the expectation of success resulting from the disclosure of Bergman that 20 ppm of ozone in water is possible at room temperature, which concentration is disclosed as preferable by Nelson in photoresist stripping, and Hu et al that room temperature photoresist stripping is possible with ozone/water solutions it would have been within the scope of one of ordinary skill in the art to combine the teachings of Bergman et al with Hu et al and Nelson et al to enable one of ordinary skill in the art to be led to the recited temperature range including wafer cooling if desired to achieve a desired effectiveness of the photoresist stripping process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Fourson whose telephone number is (703) 308-2544. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on 703-571-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Fourson  
Primary Examiner  
Art Unit 2823

GFourson  
October 17, 2004